Amendments to the Claims:

Please amend claims 10-19, 21-28, 45-53, 55, and 57-63 herein. Please cancel claims 1-9, 20, 29-44, and 56 without prejudice or disclaimer. Please note that all claims currently pending and under consideration in the above-referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-9 (Canceled)

10. (Currently amended) A method of selectively etching silicon, comprising: exposing a silicon layer on a semiconductor substrate to an etch solution comprising ~~a~~ tetramethylammonium hydroxide ("TMAH") and at least one organic solvent; and removing the silicon layer without removing at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a~~ an exposed nitride layer, and ~~a~~ an exposed polyimide layer also present on the semiconductor substrate.

11. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer on ~~the~~ a semiconductor substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising TMAH and at least one organic solvent that comprises at least one hydroxyl group.

12. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer on ~~the~~ a semiconductor substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising TMAH and at least one organic solvent having at least one hydroxyl group that dissociates and forms at least one hydroxyl ion.

13. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer on ~~the~~ a semiconductor substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising TMAH and at least one organic solvent selected from the group consisting of isopropanol, butanol, hexanol, phenol, glycol, glycerol, ethylene glycol, propylene glycol, glycerin, and mixtures thereof.

14. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer on ~~the~~ a semiconductor substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising TMAH and propylene glycol.

15. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer on ~~the~~ a semiconductor substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising from approximately 1% by weight to approximately 10% by weight of TMAH.

16. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer on ~~the~~ a semiconductor substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising approximately 6% by weight of TMAH.

17. (Currently amended) The method of claim 10, wherein exposing ~~the~~ a silicon layer to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon layer to an etch solution comprising approximately 6% TMAH and approximately 94% propylene glycol.

18. (Currently amended) A method of removing a heat-affected zone ("HAZ") on a semiconductor substrate, comprising:

~~forming a HAZ in a silicon substrate~~providing a silicon substrate having a HAZ; and removing the HAZ without removing at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a~~ and an exposed nitride ~~layer, and a polyimide~~ layer present on the silicon substrate by exposing the silicon substrate to an etch solution comprising tetramethylammonium hydroxide ("TMAH") and at least one organic solvent.

19. (Currently amended) The method of claim 18, wherein ~~forming the HAZ in the silicon substrate~~ providing a silicon substrate having a HAZ comprises forming the HAZ by laser ablation.

Claim 20 (Canceled)

21. (Currently amended) The method of ~~claim 20,~~ claim 18, further comprising removing at least a portion of the silicon substrate other than within the HAZ with the etch solution.

22. (Currently amended) The method of claim 18, wherein removing the HAZ without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a nitride layer, and a polyimide~~ and an exposed nitride layer comprises exposing the silicon substrate to an etch solution comprising TMAH and at least one organic solvent that comprises at least one hydroxyl group.

23. (Currently amended) The method of claim 18, wherein removing the HAZ without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, and ~~a nitride layer, and a polyimide~~ an exposed nitride layer comprises exposing the silicon substrate to an etch solution comprising TMAH and at least one organic solvent having at least one hydroxyl group that dissociates and forms at least one hydroxyl ion.

24. (Currently amended) The method of claim 18, wherein removing the HAZ

without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a nitride layer, and a polyimide~~ and an exposed nitride layer comprises exposing the silicon substrate to an etch solution comprising TMAH and at least one organic solvent selected from the group consisting of isopropanol, butanol, hexanol, phenol, glycol, glycerol, ethylene glycol, propylene glycol, glycerin, and mixtures thereof.

25. (Currently amended) The method of claim 18, wherein removing the HAZ without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a nitride layer, and a polyimide~~ and an exposed nitride layer comprises exposing the silicon substrate to an etch solution comprising TMAH and propylene glycol.

26. (Currently amended) The method of claim 18, wherein removing the HAZ without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a~~ and an exposed nitride ~~layer, and a polyimide~~ layer comprises exposing the silicon substrate to an etch solution comprising from approximately 1% by weight to approximately 10% by weight of TMAH.

27. (Currently amended) The method of claim 18, wherein removing the HAZ without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a~~ and an exposed nitride ~~layer, and a polyimide~~ layer comprises exposing the silicon substrate to an etch solution comprising approximately 6% by weight of TMAH.

28. (Currently amended) The method of claim 18, wherein removing the HAZ without removing ~~the~~ at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a~~ and an exposed nitride ~~layer, and a polyimide~~ layer comprises exposing the silicon substrate to an etch solution comprising approximately 6% TMAH and approximately 94% propylene glycol.

Claims 29-44 (Canceled)

45. (Currently amended) A method of forming an aperture in a through-wafer interconnect, comprising:

exposing a silicon substrate to a laser beam to form an aperture, wherein the laser beam forms a heat-affected zone ("HAZ") on the silicon substrate;

exposing the silicon substrate to an etch solution comprising tetramethylammonium hydroxide ("TMAH") and at least one organic solvent; and

removing the HAZ without removing at least one of ~~a~~ an exposed metal layer, an exposed oxide layer, ~~a~~ an exposed nitride layer, and ~~a~~ an exposed polyimide layer present on the silicon substrate.

46. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to an etch solution comprising TMAH and at least one organic solvent that comprises at least one hydroxyl group.

47. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to an etch solution comprising TMAH and at least one organic solvent having at least one hydroxyl group that dissociates and forms at least one hydroxyl ion.

48. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to an etch solution comprising TMAH and at least one organic solvent selected from the group consisting of isopropanol, butanol, hexanol, phenol, glycol, glycerol, ethylene glycol, propylene glycol, glycerin, and mixtures thereof.

49. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent

comprises exposing the silicon substrate to an etch solution comprising TMAH and propylene glycol.

50. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to an etch solution comprising from approximately 1% by weight to approximately 10% by weight of TMAH.

51. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to an etch solution comprising approximately 6% by weight of TMAH.

52. (Currently amended) The method of claim 45, wherein exposing the silicon substrate to ~~the~~ an etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to an etch solution comprising approximately 6% TMAH and approximately 94% propylene glycol.

53. (Currently amended) The method of claim 45, further comprising filling the aperture with a conductive material to form ~~the~~ a through-wafer interconnect.

54. (Original) The method of claim 45, further comprising removing at least a portion of the silicon substrate with the etch solution.

55. (Currently amended) A method of forming a through-wafer interconnect, comprising:

exposing a silicon substrate to a laser beam to form an aperture, wherein the laser beam forms a heat-affected zone ("HAZ") on the silicon substrate;

removing the HAZ without removing at least one of ~~a~~ an exposed metal layer, an exposed oxide

layer, ~~a~~ and an exposed nitride ~~layer, and a polyimide~~ layer present on the silicon substrate by exposing the silicon substrate to an etch solution comprising tetramethylammonium hydroxide ("TMAH") and at least one organic solvent; and

filling the aperture with a conductive material to form a through-wafer interconnect.

Claim 56 (Canceled)

57. (Currently amended) The method of ~~claim 56,~~ claim 55, wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising TMAH and at least one organic solvent that comprises at least one hydroxyl group.

58. (Currently amended) The method of ~~claim 56,~~ claim 55, wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising TMAH and at least one organic solvent having at least one hydroxyl group that dissociates and forms at least one hydroxyl ion.

59. (Currently amended) The method of ~~claim 56,~~ claim 55 wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising TMAH and at least one organic solvent selected from the group consisting of isopropanol, butanol, hexanol, phenol, glycol, glycerol, ethylene glycol, propylene glycol, glycerin, and mixtures thereof.

60. (Currently amended) The method of ~~claim 56,~~ claim 55, wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising TMAH and propylene glycol.

61. (Currently amended) The method of ~~claim 56,~~ claim 55, wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising from approximately 1% by weight to approximately 10% by weight of TMAH.

62. (Currently amended) The method of ~~claim 56,~~ claim 55, wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising approximately 6% by weight of TMAH.

63. (Currently amended) The method of ~~claim 56,~~ claim 55, wherein exposing the silicon substrate to ~~the~~ a first etch solution comprising TMAH and ~~the~~ at least one organic solvent comprises exposing the silicon substrate to the first etch solution comprising approximately 6% TMAH and approximately 94% propylene glycol.

64. (Original) The method of claim 55, further comprising removing at least a portion of the silicon substrate with a second etch solution to enlarge a diameter of the aperture.

65. (Original) The method of claim 55, further comprising removing at least a portion of the silicon substrate with a second etch solution comprising ammonium fluoride, phosphoric acid, water, hydrogen peroxide, and at least one organic solvent

66. (Original) The method of claim 55, further comprising smoothing at least a portion of the silicon substrate with a second etch solution comprising ammonium fluoride, phosphoric acid, water, hydrogen peroxide, and at least one organic solvent.

67. (Original) The method of claim 55, further comprising forming a passivation layer on sidewalls of the aperture before filling the aperture with the conductive material.